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Suppliers' Information Note

For The BT Network

BT Wholesale Broadband Connect (WBC) Fibre to the Premise (FTTP)
Service & Interface Description

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1. Introduction

Supplier's Information Note (SIN) 509 provides technical information for the BT Wholesale Broadband Connect (WBC) Fibre to the Premise (FTTP) service.

Please check with the https://www.bt.com/about/sinet site to ensure you have the latest version of this document.

This SIN should be read in conjunction with SIN 472 [1] for the WBC service and SIN 506 [2] for the Openreach Fibre to the Premise (FTTP) Generic Ethernet Access service.

Further information regarding the product can be obtained by contacting your company's BT Wholesale Account Manager.

2. Service Outline

2.1 General

The WBC FTTP Service provides an End User (EU) Access service option as part of the overall WBC Service. Openreach provides the Generic Ethernet Access for an End User Access up to a point of handover in an exchange (which is not necessarily the same telephone exchange as for the EU's Public Switched Telephone Network exchange line (PSTN)) and WBC backhauls it on behalf of its Service Providers (SPs) to one of 20 WBC Interconnect Nodes.

2.2 Service Availability and Tariffs

The availability of WBC FTTP for an EU can be obtained from the Broadband Availability Checker, which can be found at:

https://www.broadbandchecker.btwholesale.com

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3. Interface Descriptions

3.1 General

The WBC FTTP product is based on the Openreach Generic Ethernet Access over FTTP (GEA FTTP) product.

The WBC FTTP product provides a fibre connection for the entire route between the Exchange and the premises being served and provides an alternative solution to WBC Fibre to the Cabinet (WBC FTTC). WBC FTTP and WBC FTTC will co-exist within some exchange areas and in some cases WBC FTTP and WBC FTTC will both be available within the same Primary Connection Point (PCP).

3.2 Interface presentation

The WBC FTTP product offers an active wholesale network connection from the Aggregation Point (AP) to the End User premise with Ethernet presentation at the End User's Network Interfaces. Communication Providers (CPs) are able to provide their broadband services over this active network connection.

The WBC FTTP service is delivered on a single Virtual Local Area Network (VLAN) and is presented to the CP via the AP.

BT Wholesale will provide and maintain the WBC FTTP service. General information regarding this service can be found in Openreach SIN 506. [2]

3.3 Architecture

WBC FTTP end user access uses the same network architecture as the other WBC end user access variants. This is described in SIN 472 [1]

3.4 End User Access

For a description of the WBC service please see the Wholesale Broadband Connect Operational Handbook:

https://www.btwholesale.com/products-and-services/data/broadband.html

The WBC FTTP service terminates on an Optical Network Termination device (ONT) in the End User's premises. The ONT must be fixed in position to prevent damage to the optical fibres. This is an active NTE which allows Openreach to monitor and test the service provided. The ONT must be within reach of a power supply and it is designed to remain connected to the power at all times. Please note that Openreach does not proactively react to alarms relating to ONT power failure.

The ONT is owned by Openreach and presents one or more Ethernet ports each of which can carry a separate WBC FTTP service. The Ethernet port marks the end of the WBC FTTP product within the End User premises. This is the point where the CP will connect their Customer Premises Equipment (CPE). The ONT may have one or more voice ports designed to be used with Fibre Voice Access (FVA). BT Wholesale does not offer service over FVA.

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3.5 Intermediate Agent/DHCP Relay Agent

Intermediate Agent is supported on the WBC network. However, DHCP Relay Agent is not supported.

4. References

Suppliers Information Notes:

[1]	SIN 472	BT Wholesale Broadband Connect (WBC) Products Service Description
[2]	SIN 506	Fibre to the Premises (FTTP) Generic Ethernet Access, Service and Interface Description

SINs can be found at https://www.bt.com/about/sinet

5. Abbreviations

AP	Aggregation Point
BT	British Telecommunications Plc.
BRAS	Broadband Remote Access Server
CP	Communications Provider
CPE	Customer Premise Equipment
DHCP	Dynamic Host Confiuration Protocol
EU	End User
FTTC	Fibre to the Cabinet
FTTP	Fibre to the Premise
GEA	Generic Ethernet Access
IA	Intermediate Agent
MSIL	Multi Service Interconnect Link
NGA	Next Generation Access
NTE	Network Termination Equipment
ONT	Optical Network Termination device
PCP	Primary Connection Point
PPP	Point-to-Point Protocol
PPPoE	Point-to-Point Protocol over Ethernet

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PSTN	Public Switched Telephone Network
QOS	Quality Of Service
SIN	Suppliers' Information Note (BT Publication)
SP	Service Provider
SVLAN	Service Virtual Local Area Network
VLAN	Virtual Local Area Network
WBC	Wholesale Broadband Connect

6. History

Issue	Date	Changes
Issue 1.0	October 2011	First Issue
Issue 1.1	October 2012	Reference to trial removed in introduction Amendment to General interface description
Issue 1.2	March 2013	New Sections 3.5 Intermediate Agent/DHCP Relay Agent and 3.5.1 Inverted DHCP/PPPoE
Issue 1.3	June 2018	Uplift to new SIN template, removed references to SIN477 (which has been withdrawn), updated references to Fibre Voice Access. Corrected reference to SIN472. Replaced Figure 1 (network architecture) with a reference to SIN472. Removed section 3.5.1 and Figure 2 as these are unnecessary repetition of information in SIN 506. Removed redundant glossary entries.
Issue 1.4	June 2019	Updated general description and URLs.
Issue 1.5	June 2020	Updated with new BBAC URL
Issue 1.6	August 2020	Change SINet site references from http://www.btplc.com/sinet/ to https://www.bt.com/about/sinet
Issue 1.7	June 2022	Change to Registered Office and other minor formatting changes

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